

INDICATOR 4-20 mA ST0028



DESCRIPTION

ST0028 is an intrinsically safe LCD indicator that shows, in engineering units, the 4-20 mA loop current value. The instrument is designed to be connected to an "Head-mounted" type transmitter.

ST0028 is self-powered through a small voltage drop on the loop. Using the three buttons, it's possible to modify the main reading parameters and to calibrate the A/D converter. All configuration and calibration values are stored in a non-volatile memory type EEPROM.

The instrument has a bypass connection: it has two inlet terminals and two outlet wires to be connected to the transmitter.

ST0028 comes without a housing and it can be installed through three holes.

The buttons are mounted on the back panel but on request they can be supplied on the front panel. The front panel can be personalized as per client's needs.

ELECTRICAL AND PHYSICAL SPECIFICATIONS

- **Connections:** 4 terminals 0.2 - 2.5 mm² (AWG 24÷12) + 2 wires
- **Operating temperature:** -40 / +70 °C
- **Storage temperature:** -40 / +80 °C
- **Humidity:** 0 - 90 % non-condensing
- **Inlet signal:** 4-20 mA
- **Operating range:** 3.6 - 22 mA (max 2.5 - 30 mA)
- **Over-load limits:** 3.6 - 22 mA
- **Voltage drop on loop:** max 2.5 V (@ 22 mA)
- **Indication:** LCD display 4 digits, 7 segments h = 12 mm
- **Display:** TN reflective positive; visual angle h 6:00
- **Calibration and programming memory:** non-volatile memory EEPROM
- **Data storage:** 10 years
- **Mounting:** three holes Ø 3.2 mm



OPERATING SPECIFICATIONS

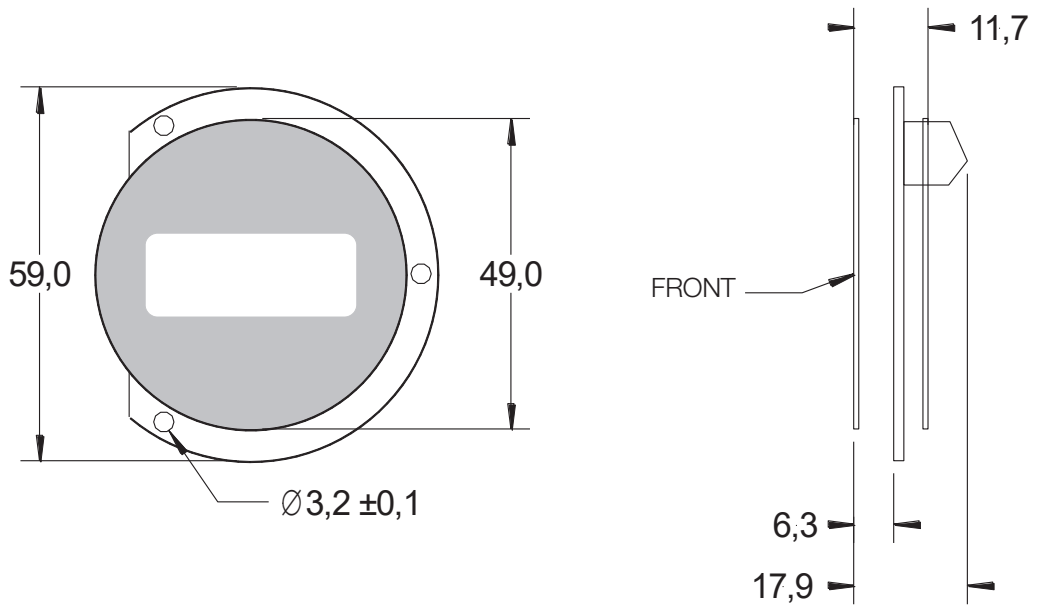
- **Settable values:** zero, full scale, decimal point position
- **Indication range:** -1999 / 9999
- **Settable value:** any included in the indication range
- **Decimal point position:** 0, 1, 2 or 3 decimal digits
- **Applicable reading functions:** filter on reading, over- load limits selection, resolution selection, root extraction
- **Filter setting:** from 1 to 8 averages on reading
- **Update time:** 0.25 - 2 s depending on filter
- **Resolution:** settable from 1 to 10 points
- **Calibration:** zero (4 mA) and full scale (20 mA) values with data storing on EEPROM

PERFORMANCE

- **Accuracy:** 0.1 % of the selected range ± 1 digit
- **Temperature drift:** 100 ppm/°C
- **EMC:** according to EN61000-6-4 and EN61000-6-2 with correctly installed instrument

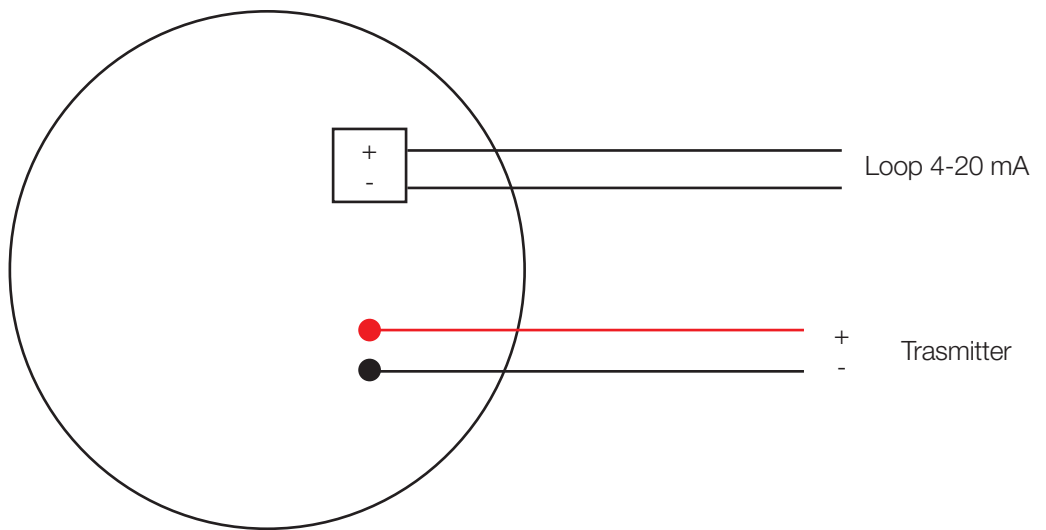
DIMENSIONS

Dimensions in mm. Tolerance where not indicated: ± 0.2 mm.
Installation holes are placed at 120° on a 54 mm diameter.



WIRING

If used without a transmitter, connect the two cable ends between them.



APPROVALS



On request the following approvals are available:

- ATEX Ex i
- IECEx Ex i



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